

Title (en)
Operating apparatus of discharge lamp

Title (de)
Gerät zum Betreiben einer Entladungslampe

Title (fr)
Appareil pour alimenter une lampe à décharge

Publication
EP 0944294 A2 19990922 (EN)

Application
EP 99105451 A 19990317

Priority
JP 6805898 A 19980318

Abstract (en)
An operating apparatus of a discharge lamp for operating the discharge lamp having an arc tube defining a discharge space includes: generation means for generating a first waveform signal having a frequency component of an acoustic resonance frequency exciting a mode which straightens an arc discharge, a center line of a waveform of the first waveform signal being maintained at a fixed level; and modulation means for modulating the first waveform signal periodically so that a polarity of the center line of the first waveform signal changes alternately at a modulation frequency which is lower than the acoustic resonance frequency, and generating a modulated signal. A modulation depth α / β , where α is a peak-to-peak amplitude of the first waveform signal and β is an effective value of an amplitude of the modulated signal, is set at such a value that a sealed material in the arc tube is prevented from adhering to a center portion of the arc tube in substantially a strip shape. <IMAGE>

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CPC (source: EP KR US)
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Cited by
EP2337433A3; EP1768468A3; EP1087644A1; FR2799062A1; WO2004064409A1; US6232725B1; US6556463B1; WO0036882A1; EP1588568B1

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